

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. – 94. (Cancelled)

95. (Previously Presented) A computer-implemented graphical user interface comprising:
a display displaying a parent profile representing an outline for design, the outline delineating a shape of a physical structure, the profile including segments, each of the segments having at least one dimensional characteristic; an icon for selecting at least one segment of the divided segments and modifying the at least one dimensional characteristic of the selected at least one segment; and

an icon for evolving the parent profile using a genetic algorithm to produce an offspring profile, the evolving including evolving the modified at least one dimensional characteristic of the selected at least one segment, the offspring profile representing a new outline for the design, the new outline delineating a new shape of the physical structure.

96. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the segments of the profiles represent curves and lines of contours of externally visible components of the structure.

97. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes at least one dimensional characteristic pertaining to the overall profile.

98. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes different levels of detail.

99. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes a grouping of the segments that represents a component of the structure.

100. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes a grouping of the segments that represents a component of the structure, the grouping including at least one dimensional characteristic pertaining to the grouping.

101. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes at least two groupings of the segments that respectively represent at least two components of the structure, the profile including a relational parameter pertaining to a relationship between the at least two groupings.

102. (Previously Presented) A graphical user interface as claimed in claim 95, wherein at least one of the profiles includes a relationship between at least two of the segments, the relationship including a radius parameter.

103. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the profiles are of an automobile.

104. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the display displays the offspring profile.

105. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the display simultaneously displays the parent and offspring profiles.

106 (Previously Presented) A graphical user interface as claimed in claim 98, wherein the display displays at least one of the profiles at one of the different levels of detail.

107. (Previously Presented) A graphical user interface as claimed in claim 99, wherein the display displays the grouping.

108. (Previously Presented) A graphical user interface as claimed in claim 99, wherein the display includes a first window displaying at least one of the profiles and a second window displaying the grouping.

109. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the display displays a family tree identifying successive generations of the parent and offspring profiles.

110. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the display simultaneously displays the parent profile, the offspring profile, and a family tree identifying successive generations of the parent and offspring profiles.

111. (Previously Presented) A graphical user interface as claimed in claim 95, wherein the display is a three-dimensional display displaying at least one of the profiles as a three-dimensional image.

112. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising a profile editor to specify or modify the at least one dimensional characteristic for at least one of the segments.

113. (Previously Presented) A graphical user interface as claimed in claim 97, further comprising a profile editor to specify or modify the at least one dimensional characteristic pertaining to the overall profile.

114. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising a profile editor to modify at least one of the profiles to identify a grouping of the segments that represents a component of the structure.

115. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising:

a profile editor to modify at least one of the profiles to identify a grouping of the segments that represents a component of the structure, and to specify or modify at least one dimensional characteristic pertaining to the grouping.

116. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising:

a profile editor to modify at least one of the profiles to identify at least two groupings of the segments that respectively represent at least two components of the structure, and to specify or modify a relational parameter pertaining to a relationship between the at least two groupings.

117. (Previously Presented) A graphical user interface as claimed in claim 102, further comprising a profile editor to specify or modify the relationship between the at least two segments.

118. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising a profile editor to isolate at least one of the segments of the parent profile from evolving.

119. (Previously Presented) A graphical user interface as claimed in claim 97, further comprising a profile editor to isolate the at least one dimensional characteristic pertaining to the overall profile from evolving.

120. (Previously Presented) A graphical user interface as claimed in claim 99,
wherein the grouping is part of the parent profile, and
further comprising a profile editor to isolate the grouping from evolving.

121. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising a profile editor to select at least one of the segments specifically for evolving.

122. (Previously Presented) A graphical user interface as claimed in claim 95,
wherein the parent profile includes at least two groupings of the segments that
respectively represent at least two components of the structure, and
further comprising a profile editor to select one of the two groupings specifically for
evolving.

123. (Previously Presented) A graphical user interface as claimed in claim 100,
wherein the grouping is part of the parent profile, and
wherein the genetic algorithm evolves the at least one dimensional characteristic
pertaining to the grouping.

124. (Previously Presented) A graphical user interface as claimed in claim 101,
wherein the at least two groupings are part of the parent profile, and
wherein the genetic algorithm evolves the relational parameter pertaining to the
relationship between the at least two groupings.

125. (Previously Presented) A graphical user interface as claimed in claim 102,
wherein the relationship between the at least two segments is part of the parent profile,
and
wherein the genetic algorithm evolves the relationship between the at least two of the
segments.

126. (Previously Presented) A graphical user interface as claimed in claim 95, further comprising a profile editor to specify a user preference to keep at least one of the segments unchanged during the evolving.

127. (Previously Presented) A graphical user interface as claimed in claim 99, further comprising a profile editor to specify a user preference to keep the grouping unchanged during the evolving.

128. – 129. (Cancelled)